

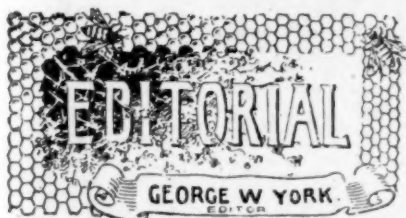
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE PAPER IN AMERICA

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VOL. XXXIV. CHICAGO, ILL., SEPT. 13, 1894. NO. 11.



Wintering Bees Out-Doors is a subject which Chas. Dadant knows a good deal about. On page 338 of this issue of the BEE JOURNAL, he tells how it may be done successfully. Read it.

A Glorious Rain came to the region of Chicago on Monday, Sept. 3rd. How it did brighten up the withered herbage along the streets of the suburbs! It seemed as if we hadn't seen any rain for two months, so the grand down-pour that we had last week was greatly appreciated. It will likely help out the fall flowers, and thus assure sufficient stores for the bees the coming winter.

Subscription Credits are not fully understood by some, it seems. If the label on the wrapper of your copy of the BEE JOURNAL reads "Aug94" or "Aug4," it means that your subscription is paid up to the end of August, 1894. Your subscription is always paid to the end of the month named on your BEE JOURNAL wrapper-label. Please remember this. If it now shows any month back of August, 1894, we would be pleased to have you pay up to the present time, and also a year in advance.

A Sketch and Portrait of Bro. Ernest R. Root appeared in *Gleanings* for Sept. 1st. Mr. J. T. Calvert, the genial business manager of *Gleanings*, taking advantage of E. R.'s absence on his Western bicycle tour, inserted the half-tone portrait and, biographical sketch written by Dr. Miller for the AMERICAN BEE JOURNAL last year. Wonder if Bro. R., when he first saw it, didn't think that was a pretty slick "put up job." We think it was, and "served him right," too, for not letting his many readers see his face long ago. The picture shows him with beard, but we prefer him as he was when here two weeks ago—with simply a mustache. But owing to a throat affection that troubles him at certain seasons of the year, he affects to wear a beard!

The C. B. & Q. Railroad is the best line to take for the North American convention at St. Joseph, Mo., on Oct. 10th, 11th and 12th. The "Harvest Excursion" starts from all points east of the Missouri river, on Oct. 9th, and your tickets will be good for 20 days. The fare for one way and \$2.00 will take you the round trip from any point. It's cheap! Everybody can go! The total cost for round trip from Chicago, on the C. B. & Q., will be \$14.50. Say, you Eastern friends, why not write ahead, and make up a "special car" from Chicago? We can have it if we can fill it. What do you say?

Agents at Fairs.—We would like to have some good, live bee-keepers represent the BEE JOURNAL at the Fairs this fall. Sample copies free. Write to us about it, if you can attend to this work.

Sound Advice is worth heeding. One of our exchanges contained an item some time ago that we feel well deserves to be copied. Read it, and then think over it. We don't print it because we have noticed any dropping off of our own list of readers lately, but because it has so much truth in it:

SOUND ADVICE FROM A PHILOSOPHER.

These are hard times for the farmer, there is no doubt about that, and he is looking in every direction to cut down expenses, and it is right for him to do so, but I wish to say a word against cutting off one item, and that is the farm paper. Don't stop your paper! the harder the times, the more you need the paper. If there ever is a time—and there never is—when a farmer can afford to do without the farm journal, it is when times are good; then he can get along somehow, because crops are good and prices high, but even then he would make more money if he kept well informed about his business.

Now, don't stop your paper; you can find some way to pay for it without sacrificing anything essential if you try. If you feel too poor to pay for your paper, you will feel still poorer after you have stopped it; you will feel more discouraged, for while you have the paper you will read how other men are doing—some of them worse off than yourself—and you will feel encouraged to go on and try harder than ever to earn the hard-to-get dollars.

If in the above you will substitute "bee-paper" for "farm paper," it will be just as truthful. By all means, read, READ, READ. It will pay you.

Dr. Wm. R. Howard, of Ft. Worth, Tex., is now Professor of History, Pathology and Bacteriology, in the Medical Department of Ft. Worth University. He is also Secretary of the University Faculty. The "First Annual Announcement" contains this notice of Dr. Howard's work:

This department will give instruction in the use of the microscope in the cutting, staining and mounting of specimens, and the examination of healthy and morbid tissues. Students will study in tube, plate, drop culture and stained cover glass preparation, all pathogenic and non-pathogenic forms of micro-organism capable of cultivation. Two lectures will be delivered each week, and four hours laboratory work required.

From this it will be seen that the position is an important one, which the Doctor will certainly fill acceptably. His book on "Foul Brood" is a good sample of what he can do in the line of careful scientific investigation.

Honey Statistics for 1894.—In *Gleanings* for Sept. 1st, we find the following editorial paragraphs regarding the honey crop of the United States this year:

ONE OF THE POOREST CROPS ON RECORD.

Three weeks ago we sent out about 200 return postal cards on which were printed these questions:

1. What has been the honey season in your vicinity, so far as you know?
2. What was your average yield per colony, in honey, both comb and extracted?

Space was left for a brief answer under each, and for name and address of reporter:

Briefly stated, the honey crop seems to have been most abundant in central and lower Florida; good in Texas; fairly good in spots, in Kern and Inyo counties, Calif., in Oregon, Utah, Colorado, Minnesota, Wisconsin, Ohio, Michigan, New York and New England; very poor in other portions of most of these States and others, and a total failure in the most of California, Nebraska, Iowa, Illinois, Missouri, Kentucky, Tennessee, Mississippi, North Carolina, South Carolina and Georgia. The general impression given by the reports for the whole country is not flattering.

One peculiar thing we have noted from reports is the uneven distribution. Of two bee-keepers but a few miles apart, one would get a fairly good crop, while the other's bees would be starving. On this account these reports may not fairly represent many localities, as the reports received will not average more than five or six to each State.

From the above it would seem that the poor crop has been so general throughout the United States that there would be scarcely enough honey to supply the demand. But what do we find to be the case? Why, judging from a recent conversation with a large dealer in honey here in Chicago, there is plenty of honey in the country somewhere. He said he knew where he could get it by the carload—from the West, and also the far East. But the limited demand for honey just now, may have caused the appearance of a bountiful supply.

In speaking of the honey market, on another page of the same copy of *Gleanings*, Bro. Root has this to say:

Comparing the reports of the season's honey crop with the market report of prices gives a vivid picture of the very depressing effect on prices of the close times through which we have been passing. Notwithstanding a very short crop, judging from reports, we have never known prices to be lower so early in the season. Last year, those who got their honey to market early, secured the best prices, as a rule. If

times improve from now on, as we hope they will, the demand for honey, and price, must also improve in view of the short crop.

Do not be in haste to sell at ruinously low prices what little honey you have secured, but help to tone up the market by a little more independence in asking a fair price for your product.

That's a good hint in the last paragraph. If you don't ask a fair price for your honey, you certainly won't get it. Oftentimes bee-keepers themselves are to blame for low prices of honey and a glutted market. Let all endeavor, if possible, to secure a more even distribution of the crop obtained, and thus realize at least a reasonable remuneration for their labor and skill.

Reduced Rates, (1½ for the round trip) in addition to the "Harvest Excursion" rates have been secured on many of the roads running to St. Joseph, Mo., for the North American convention on Oct. 10th, 11th and 12th. The following from Secretary Benton explains the matter more fully:

REDUCED RAILWAY FARES TO ATTEND THE
NORTH AMERICAN AT ST. JOSEPH, MO.,
OCT. 10TH, 11TH AND 12TH.

The Western Passenger Association, under the conditions named below, will grant reduced railway fare to those who travel over their roads and attend the meeting of the North American Bee-Keepers' Association at St. Joseph, Mo., Oct. 10th, 11th and 12th.

Conditions.—Full fare will be charged going. Return-tickets will be issued at one-third the regular fare, provided the purchaser presents a certificate from the agent of whom he obtained his ticket, and provided also at least 100 such certificates shall be presented. There can be little doubt on this last point, especially as special round-trip excursion tickets, even such as are issued to parties of 10, 25, or more, traveling in a body, will count toward the 100, provided each purchaser is careful to secure a certificate of purchase from the ticket agent who sells him the ticket, and to present this certificate at the convention to be countersigned by the Secretary of the Association.

Therefore do not fail to secure a certificate when you purchase your ticket, whether single or round-trip, and no matter whether you intend to take advantage of the reduced fare or not. It may aid others in obtaining the reduction.

Time of Tickets.—Valid Oct. 6th to Oct. 15th; that is, they may be purchased three days (not counting Sunday) before the first day of the meeting, and the return-ticket may be obtained any time up to the night of Oct. 15th.

Railways.—The following are the roads included in this reduction: Burlington, Cedar Rapids & Northern; Chicago & Alton; Chicago & Northwestern; Chicago, Burlington & Quincy; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minn. & Omaha; Hannibal & St. Joseph; Kansas City, St. Joseph & Council Bluffs; St. Louis, Keokuk & Northwestern; Illinois Central; Iowa Central; Minneapolis & St. Louis; Missouri Pacific; Rock Island & Peoria; Sioux City & Pacific; Wabash; Wisconsin Central lines.

When necessary to pass over more than one line, and in case a through ticket with a certificate cannot be obtained, it will be necessary to obtain a certificate from each agent from whom a ticket is purchased, in order to entitle the holder to the reduction on return ticket.

Those who do not live within the territory covered by these lines should, wherever practicable, purchase a local or a round-trip ticket to the nearest line named above, and secure there a ticket to St. Joseph, with certificate of purchase.

Further notice will be given in case other railway lines grant reduced rates.

Harvest Excursion.—Some may be able to take advantage of the "Harvest Excursion" rates (one-half fare plus \$2.00) given Oct. 9th, full particulars of which can be obtained of your local agents.

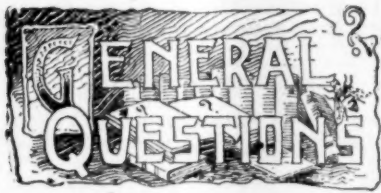
Change of Date.—Note the change, as announced by President Abbott, in the date of the meeting from the middle of the month to Oct. 10th, 11th and 12th.

Place of Meeting.—The convention will meet in the rooms of the Commercial Club in St. Joseph, at the corner of 3rd and Edmond streets, three blocks from Francis Street Depot. Take electric cars at Union Depot and get off at 3rd street.

FRANK BENTON,
Sec'y. N. Am. Bee-Keepers' Association,
U. S. Dept. Agriculture,
Washington, D. C.

We might add to the foregoing that it is desired to have a showing of honey, especially extracted, from every part of the country at the convention, and it is requested that every one who attends should bring a bottle of extracted honey, with the kind of honey and the place where it was gathered marked upon a label to be fastened to the same.

The Portrait and Apiary of Mr. F. A. Gemmill. President of the Oxford, Ontario, Bee-Keepers' Association, were shown in the September *Canadian Bee Journal*. Both pictures are good. Bro. Gemmill is one of Ontario's best bee-keepers. He says: "I find the employment [bee-keeping] not only interesting and ennobling, but a moderately paying occupation as well."



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—Ed.

Italian Bees as Comb-Builders.

Are Italian bees equal or superior to the German brown, or common black bees, as comb-builders? J. F. C.

Garden City, Kans.

ANSWER.—I don't know that there's any difference in general. Some colonies of Italians are a little faulty as to making white looking comb. They fill the honey too close to the capping, making it look dark and watery.

Why Were Queen-Cells Built?

What is the cause of bees building queen-cells when they have a young queen which has been laying about four weeks, and the colony is strong?

Quincy, Ill., Aug. 21.

H. M.

ANSWER.—Without knowing all about the circumstances, it is not easy to say. Possibly it is one of those rare cases where they are getting ready to swarm. Possibly the queen is not satisfactory and the bees are about to supersede her. This latter is quite often the case, but is not known very often where queens are not clipped.

Italian vs. Blacks as Robbers.

Are Italian bees worse than blacks for robbing? While I had blacks only, I had no trouble with robbers, but lately (with Italians only) I have had a good deal of trouble. Not long since I wanted to Italianize a colony of blacks, and in taking out the frames while looking for the black queen I broke some comb, which started the Italians to robbing.

They came in such numbers that I did not know what to do. I contracted the entrance to about $\frac{3}{4}$ of an inch, yet they piled up on the hive like a swarm. I then got camphor and carbolic acid, made a solution, and sprinkled them all thoroughly, but "no go"—they never let up until they had killed every black bee. Now could I have done more than I did? If so, what? F. M.

ANSWER.—My experience is just the reverse of yours. When I had black bees I had some pretty tough times with robbing. This year has been one of entire failure of the honey crop, when there's every inducement for robbing, and I've had no trouble whatever, although my bees were never so nearly all pure Italians.

I doubt if there's any particular difference. Once started, perhaps Italians are more energetic at robbing than blacks.

If you ever get into a scrape of the same kind again, pile hay or straw at the entrance, up to the top of the hive if necessary, then pour on water and keep it thoroughly wet. This will dampen the ardor of the robbers, for water is quite dampening, but don't be sparing of it.

After all, prevention is better than cure, and robbing is nearly always started by the bee-keeper himself.

Why No Surplus Honey Stored?

This season my bees have not stored any surplus honey up to the present time, and I have had but two swarms, and they issued from one hive. The rest of my colonies haven't swarmed, nor have they stored any surplus honey. There are plenty of fall weeds to work on now, as most of them are in bloom. What is the reason they have done so poorly?

My bees are hybrids and Italians mixed. My neighbor has 16 colonies and he has had four swarms. The balance have done nothing. What is the cause of this delay and lost time? The bees are hard at work, but I don't know what they do with so much wax, or where they put it. O. D.

Mishawaka, Ind., Aug. 20.

ANSWER.—My bees have done just like yours. The trouble is that you and I both have that kind of bees that can't store honey unless they have something to store it from, and I don't know of any one that has any other kind. Some seasons blossoms are scarce, and some-

times blossoms are plenty but for some reason they don't furnish nectar. The season has been to blame this year, not the poor bees.

Did They Kill the Queen?

Last evening I noticed a large ball of bees in front of one hive (the last swarm of the season, about July 28). On separating the bees I found they had killed a queen. This morning they seem all unsettled, rushing in and out of the hive in great numbers. Do you think they had killed their own queen, or some other? If their own, why? A few days before that I found a dead queen in front of another strong colony, but as the bees made no fuss, I concluded they had killed a young queen. Do you think I was right?

Langlois, Oreg., Aug. 6.

ANSWER.—Hard to tell. From the after uneasiness I should suspect their own queen was killed in the case you first mention, possibly because a number of foreign bees entered. Likely your supposition was correct as to the second case.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.
Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kan.
Oct. 1.—Southern Minnesota, at Winona.
E. C. Cornell, Sec., Winona, Minn.
Oct. 4.—Utah, at Salt Lake City, Utah.
Jno. C. Swamer, Sec., Salt Lake City, Utah
Oct. 10-12.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.
1895.
Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.
Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—EMERSON T. ABBOTT....St. Joseph, Mo.
VICE-PRES.—O. L. HERBISER....Buffalo, N. Y.
SECRETARY—FRANK BENTON, Washington, D. C.
TREASURER—GEORGE W. YORK....Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—HON. R. L. TAYLOR...Lapeer, Mich.
GEN'L MANAGER—T. G. NEWMAN, Chicago, Ill.
147 South Western Avenue.

Great Premium on page 235!

OUR DOCTOR'S HINTS.

By F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Catarrh—Its Cause and Prevention.

It is not always pleasant to hear or read the cold facts, but candor should compel all writers or speakers to state the exact truth, and let decisions be what they may.

Much—very much—is written and said regarding catarrh, and all sorts of apologies are offered for its existence and fearful extension. There is every assurance that it is making fearful progress and inroads into the human economy, and for this reason the plain truth as to its usual cause and prevention should be stated.

Many years of special work and study in the various forms and ravages of catarrh, thoroughly convinces me that this infliction is largely due to want of proper hygienic information and attending cleanliness. I know this idea will shock some, but let the shock come if it have the result of earnest consideration and improvement.

Catarrh, then let me bluntly state, is the result, usually, of neglect in observing the laws of physical purity. It is the result of filthy habits, in not keeping clean—just as the itch, lice, and many other bodily infections occur—from want of proper cleanliness.

Well, now, don't hold your hands up in holy horror! It is so! Had your parents insisted on your daily cold bath, including abundant snuffing of water up the nostrils, and the frequent use of your pocket handkerchief, you might have entirely escaped any form of catarrh. But, no! you have been permitted to allow the accumulations in the nose (which naturally would occur) to be retained until they became an obstruction to free breathing, and then instead of using a handkerchief to blow your nose freely, and so keep it clean, the horrible habit of "blowing the nose the wrong way" is resorted to, which brings the accumulations in the nose into the throat, and is then expectorated! Just notice the actions of men and women in this regard—they have handkerchiefs, but how seldom do we see them used for their obvious purpose! One would conclude that the 'kerchief was an article of ornament, to dangle

from the young lady's belt, or its corner peer out of the young man's coat-pocket, that the world may see and know he is the proud possessor of a linen square; but its visit to the laundry is a matter of rare occurrence! By all means cheat the washer-woman and enrich the doctor!

Well, of course, even so lenient a friend as Mother Nature will not tolerate such infractions, and hence it occurs that the constant practice of this abomination, year after year, results in very serious organic changes in the nose, and finally in the whole respiratory tract. The secretions retained in the nose cause destruction of tissue, more or less serious, and the discharges gradually acquire a disposition to go backward, the mucous becomes decomposed and irritant, and soon affects the parts over which it passes; hence we have throat troubles following. When asleep it is unconsciously drawn into the bronchial tubes in breathing, and ultimately bronchitis results; the latter, by incidental coughing, irritates the lung tissue, and step by step the foundation is laid which culminates in consumption. If we superadd to this the habit of smoking, we greatly hasten this dreaded disease.

Once more. The acrid secretions just mentioned, come in contact with the opening of the inner canal of the ears, and by its action sets up inflammation of that canal, closing it and rendering hearing much impaired, or entirely destroyed. Then it is that the skilled physician must be consulted, and as the difficulty to overcome has been years in progress, so it may be several months in curing, when that result is possible. A cure is usually practicable if the patient applies as soon as he finds his hearing less acute than formerly. If long postponed, the chances of success are far less favorable.

Catarrh is responsible for eight out of every ten cases of deafness, and the fact that it is so alarmingly on the increase should admonish us to early seek counsel from the best sources attainable, always remembering that the best service is by far the cheapest.

But what has so far been said presupposes persons of inherited vigorous health, and if the consequences mentioned may occur to such, how much more disastrous may it be to those who have inherited weakness of the lungs or general system! Hence, it is

that we see mere children who are predisposed to organic diseases, fall early victims to affections of the lungs, throat, ears, or kidneys, through the acquirement of catarrh. Especially is this the case in the colder latitudes.

And how careless of parents to ascribe laziness as a pretext to young people's indisposition! Children in school and at home have often been punished for heedlessness in not paying prompt attention to commands, when in reality they had not heard what was said, through dullness of hearing. How frequently such afflicted children are jeered as "stupid," when, if their hearing were as acute as that of others, they would be considered equally bright! A little more discretion in our conclusions will award children much greater justice, and in turn secure for us greater affectionate esteem. Children never forget cruelties inflicted upon them in their helplessness, nor are the perpetrators recompensed. Anger will ever and anon rankle in the bosoms of the sufferers, and the spirit of resentment is ever present against those who caused their humiliation! Parents and teachers will do well to consider their responsibilities, that the future may hold for them merited love and reverence!

Parents, as you love your little ones, be admonished by your boy's cough, by your little daughter's feeling of "tired," by their want of spirited playfulness, by their lack of interest in their surroundings, to early consult your physician, and carefully heed his advice.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will create a demand for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, \$1.25; or 100 copies \$2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for \$1.15.



CONDUCTED BY

MRS. JENNIE ATCHLEY.

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.**Lesson No. 10.**

(Continued from page 270.)

HONEY-PLANTS CONTINUED.

NORTH CAROLINA.—I have obtained the following information from Mr. W. H. Pridgen, of Creek, N. C., a reliable man and good bee-keeper:

"The principal honey-plants, and their time of blooming, are as follows: Elm blooms Feb. 15th, maple March 1st, fruit-bloom March 15th to April 1st, white clover, from which North Carolina gets her best honey-flow, begins about May 15th. June 1st to 10th poplar blooms, and when the weather is favorable it yields lots of honey. Also persimmon blooms about the same time, and is good July 1st. We have sourwood, which gives our white honey. Bees usually begin swarming in North Carolina about April 15th to May 1st."

FLORIDA.—The following I obtained from Mr. J. B. Case, a reliable man, and a good bee-man of the South:

"Usually about May 15th we get here in Florida a fine honey-flow from the red bay, which grows very luxuriantly in the hammocks. The honey is rather dark, but of fine flavor. Gallberry opens about the same time, and where it is plentiful, it affords a surplus. About May 10th to 15th saw-palmetto begins to yield honey, and in locations two or three miles from the ocean, and, in fact, all along the coast, this is the main crop. The nearer salt water the more thrifty it grows. It blooms profusely, and yields honey in abundance, of light color and good quality."

"In July the cabbage palmetto—a kind of palm—sometime yields considerable honey of fine quality, but coming as it does in our rainy season, and the

blooms being very tender, it is quite liable to blast, or scorch by the hot sun coming out after a shower, and also from other causes it is very unreliable as a source of honey, but when everything hits just right, it is hard to beat for honey."

"Also the river bottoms are full of red mangrove, yielding a thin, white honey, and some seasons it affords honey in great abundance, but as its area is quite small and well stocked by bees being shipped in from the surrounding country in such quantities, it has to be a very favorable year to get paying yields from it, and lately its yields have been light."

"The above will be about right for all the eastern coast of Florida. Bees, to be profitable here in this State, must be kept near the Ocean or Gulf, or near the rivers where are the large hammocks and near large orange groves. Swarming usually begins about March 15th to April 1st, and as this is about the time oranges are in bloom, and as the trees vary, the time of swarming also varies."

KENTUCKY.—The following information as to Kentucky, I got from Dr. J. W. Crenshaw, of Versailles, whom I know to be reliable:

"Soft or water maple blooms from Feb. 1st to March 15th, according to the season, yielding both pollen and honey, and is of great value, as it gives an impetus to brood-rearing, which stimulates the bees until warm weather. It remains in bloom about a week, but the bees seldom have more than one to three days to work on it."

"Dandelion blooms March 1st, and furnishes both honey and pollen. Fruit-bloom continues from March 25th to May 1st. Sugar maple blooms April 15th—mainly honey in small quantities. May 10th black locust blooms, remaining two weeks, and most years yields a large amount of honey." [I will add here that black locust is one among our Southern honey-yielders that only yields honey from its bloom one time; that is, it never has any honey except that on opening; but it is sometimes two weeks getting done blooming.—JENNIE ATCHLEY.]

"The honey is clear, and its flavor is second to none in the world. Unfortunately it usually blooms during our rainy season, and the bees have but little chance at it. The bees only had three days to work on it last year, and they filled their brood-chambers."

"White clover blooms from May 1st

to August. This plant is the only one we can always count on in this part of Kentucky for a crop—June being the principal month of its blooming, and some years the whole face of the earth is covered with it here. It *always* blooms more or less, and *always* yields honey—enough for an abundant winter supply.

"We have a few basswoods left yet, and some poplar, and no doubt we get some honey from these sources yet, but not in paying quantities. Strawberries, raspberries, squash and tomatoes all give us some honey and pollen. Heart's-ease, or smartweed, which grows in damp places, frequently yields well, but I know nothing of the honey. Buck-wheat for bees here is nearly always a complete disappointment. Golden-rod has been observed very closely by me for a number of years, but I have never seen a bee on it."

ALABAMA.—The following data was furnished by that whole-souled bee-keeper, J. M. Jenkins, of Wetumpka, and will correctly apply to his part of the State:

"My bees begin swarming about April 5th to 15th. Our honey comes from willow, poplar, maple and swamp flowers. This locality is not much for honey. Cotton plantations are all around me—only a little natural growth along the rivers—no clover, and not much basswood here."

I have correct data for nearly all the Southern and Western States, and to make this lesson short, considering its great subject—the honey-plants—I will say that the six southern counties of California, from which counties the most honey is obtained, that their principal honey-plants are the black and white sages, the white variety growing upon the mountains or highlands, and the black grows upon the valley lands. The honey from white sage ranks first alongside of any honey in the United States, and the black sage is also good, but has an amber color, which spoils its sale in white-honey markets.

Nearly all the Southern States get a crop of nice, white honey. I used to keep bees in Tennessee, and some of the *finest* honey I ever saw was gathered there. Also Arkansas has some fine honey. Mississippi, the Carolinas, and Georgia, all produce good honey. It is a fact beyond a doubt that honey gathered from plants, trees, etc., in low lands is not as white as that gathered from

the high lands. Bees have been kept more extensively in the low lands of the South, and almost all their honey has been dark, and when shipped to Northern markets goes by the name of "Southern strained," as though the bee-keepers of the South never saw an extractor! There is also white honey in all the Southern States.

JENNIE ATCHLEY.

(To be continued.)

Will Have Good Fall Crops.

It is raining again to-day (Aug. 25th), and vegetation is growing very fast. Our whole landscape has the fragrance of a flower-garden. People are going to have good fall crops here, and have plenty. Bees are working like Trojans, and may fill their hives again.

JENNIE ATCHLEY.

Bee-Keeping for a Livelihood.

MRS. ATCHLEY:—I take the AMERICAN BEE JOURNAL, and I think it the best bee-paper printed. I am now 66 years old, and am trying the bees for a livelihood. I am going to see what there is in bees. I have done well so far, and if common bees will pay, I think the better grades will pay better, and my motto is, "Try the best."

J. F. CAREY.

Phoenix, Ariz., Aug. 11.

Friend C., I think you are quite right. I am glad that you are in line with so many other bee-keepers in thinking the "Old Reliable" a good bee-journal.

I am also in line with you when you say that if common bees will pay, that better bees will pay more. I think now that if I had to fall back to the old native German or black bees, that I would keep only bees enough for my own use, as they *cannot* be manipulated to pay as the Italians can.

JENNIE ATCHLEY.

Kind Words—Severe Drouth.

MRS. ATCHLEY:—We are just as anxious to hear from you as ever. When the "Old Reliable" comes, the first we examine is your writings, and as the AMERICAN BEE JOURNAL now stands, it is the best bee-paper we have, giving information both from North and South. You have not said anything in regard to the country lately. We are anxious to hear about how vegetation is down

there. And did you have much drouth? We are almost burned up here. The corn crop is our main support, and it is an entire failure. Wheat is better than we expected. The late frost last spring injured vegetation badly, then we had four weeks of beautiful weather through June, and up to July 3rd we had plenty of rain, but we have not had any since, and that is more than this country can stand. We have had but one swarm out of seven colonies, and lost it. What little honey we got was good—mostly alfalfa. Mrs. L. P. SMITH.

Jewell, Kans., Aug. 11.

Dear Mrs. Smith, I thank you very much for your kind compliments, and I assure you I shall try to interest some, if they will read "In Sunny Southland." I trust that I may be able to merit all the kind words from you and others that I receive almost daily, encouraging me, and helping me to give more attention to my department.

In regard to this section, I will say that our drouth was broken up by a heavy down-pour about a month ago, and this country is like a May wheat-field in Kansas, and we do not need much rain here. There are plenty of vegetables, and people are happy. I am sorry to hear of your drouth.

JENNIE ATCHLEY.



What Best to Plant for Honey.

Query 940.—Taking into consideration its value for other purposes besides honey, what honey-plant will it pay best to raise in your locality?—Colorado.

Buckwheat.—E. FRANCE.

Alsike clover.—R. L. TAYLOR.

Alsike clover.—G. M. DOOLITTLE.

Alsike clover.—MRS. L. HARRISON.

Probably Alsike clover.—J. A. GREEN.

Fruit—almost any variety.—A. J. COOK.

Alfalfa and buckwheat.—MRS. J. N. HEATER.

Either white or Alsike clover.—JAS.

A. STONE.

Alsike clover or buckwheat.—J. H. LARRABEE.

Alsike clover mixed with other grasses.—P. H. ELWOOD.

White clover. Alsike is also valuable.—S. I. FREEBORN.

Alsike clover is, beyond comparison, the best.—M. MAHIN.

I don't know, as I have had no experience in the matter.—J. E. POND.

1. Buckwheat. 2. Alsike clover. 3. Common white clover.—EUGENE SECOR.

Alsike clover, just as alfalfa is, no doubt, best for Colorado.—EMERSON T. ABBOTT.

Alsike and sweet clover, and protecting and raising linden in forest, park and yards.—J. M. HAMBAUGH.

I'm not sure but sweet clover may be the one, if it can turn off a good crop of hay by being cut early.—C. C. MILLER.

Buckwheat is the only plant in sight for the combined purpose. Hold on! Alsike is far ahead of any other plant.—C. H. DIBBERN.

Horsemint is the only plant I know of that would pay to cultivate at all here for honey. But cotton pays in both honey and cotton. So I suppose I might say cotton also.—MRS. JENNIE ATCHLEY.

In my locality, perhaps Alsike clover. The chief trouble in the way of this clover is, in my locality, it is strictly biennial in its habits. It will make but one good crop without re-sowing.—G. W. DEMAREE.

In my location I know of no special plant that I could thus cultivate. But if one had suitable soil with no use for it, it would pay him to plant the poplar (*Uriodendron*). This is the greatest honey-producing plant of the Southern States.—J. P. H. BROWN.

Alfalfa. Buckwheat is another staple crop that yields much honey, but of a dark character. White clover is probably the leading honey-plant of our nation. Out here in Colorado, we depend largely upon the wild flowers of the prairies and mountains—the "Rocky Mountain honey-plant" (a sort of teasel) is fully what its name implies, and very abundant.—W. M. BARNUM.

Have You Read the wonderful Premium offers on page 323?



VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

FEEDING BEES FOR WINTER.—The answers to the question about feeding (page 270) leave one somewhat mixed up as to what is best to do. Some advise to feed as soon as possible, even in August, while others advise to wait as long as possible in hopes fall flowers may yet yield.

I can't say for other localities, but in northern Illinois I feel safer not to put off feeding very late. Sometimes the bees gather as late as the last of September, but oftener not. I think I would rather run the risk of taking something away if they are too full, than to wait till late with the risk of having freezing weather catch me with empty combs or unsealed stores.

I generally fed as fast as the bees would take it, but I'm getting to believe I'd rather have the feed so thin that the bees shall take some time at it. If the theory is correct, that formic acid is furnished by the bees through the circulation, then it is likely that the bees will have a better chance by having the feed thin as nectar.

SOMEWHAT SURPRISED.—Hello! what's this? Page 272 opens up on something that doesn't look just like the "Old Reliable," but it says AMERICAN BEE JOURNAL at the top, so it must be all right. Don't know for certain just how I do like it. When any of my old friends come out in a new rig, I must get used to it before I really like it. Makes a very pretty page, even if it does look like a stranger, so I suppose I'll get used to it, and as there are just eight pages of that kind thrown in the middle of the number, it sets me to wondering whether possibly Miss Godfrey* has been giving free reign to a woman's taste.

BRACE AND BURR COMBS.—Bro. Doolittle, what are you thinking of, to come out as you do on page 272 at this late day? The time for it was when such earnest struggles were being made to get rid of brace-combs, and not after the struggle is pretty much over, and we have found how to prevent them. But then it is only fair to say that you entered your protest long ago.

If you are right, that "for every pound of honey stored in the brood-nest at the commencement of the season, or honey harvest, there will be five pounds less stored in the sections," and that bees commence much sooner with brace-combs, then we ought to cultivate brace-combs.

I don't suppose it's necessary to call you a liar, but if I could be set down for half an hour at your pleasant home we'd have a comfortable fight over your position. In the first place, don't the bees *always* commence storing in the brood-nest

before storing in the sections? In the second place, with bait combs I don't think I ever knew the bees to crowd the brood-nest before starting above.

But aside from all other considerations, I want the surplus apartment detached from the lower story by a space of clean wood with no braces or burrs, just because I feel quite sure the sections will be a little whiter for it. The closer the section is to a black brood-comb or brace-comb, the more black wax I find on the section.

HIGH IDEALS.—It's a good plan to have a high ideal, and Ben There would probably make better work for the high ideal he has set for himself on page 272. I fancy, however, I can see a quiet smile creep over the faces of the veterans as they read, and a remark something like this may come from some of them: "Young man, that's all right for a tenderfoot, but if ever you get fairly into the work, trying to get enough honey to swap for your bread and butter, some of your views will undergo modifications."

For instance, I'm quite sure you'd modify your idea as to having 36 square feet of ground occupied by each hive, when you learn that you can have them more convenient for yourself, and with less danger of the bees getting into the wrong hive by using only one-third of the ground per hive. But it's a good plan to have high aims, Benjamin.

Marengo, Ill.

[*Doctor, Miss Godfrey pleads "not guilty" to "giving free rein to a woman's taste," in the matter you refer to. No, "ye editor" must take all the blame this time, for he *thought* it would be a nice change to have this department set in different style from the rest of the BEE JOURNAL. Guess you'll like it all right when you "get used to it."

By the way, we might say for the information of the rest of our readers, that Miss Mattie C. Godfrey is the lady that sets up nearly all the type for the BEE JOURNAL each week. She has done this work continuously for over 11 years, or ever since January, 1883, so that now she feels quite well acquainted with at least the names of all who write anything for these pages. Miss Godfrey is one of the few women that are "worth their weight in gold." Now, we don't want any frisky young fellow to come "snooping around" here, for he'd have to be unusually perfect to receive anything from her except a firm "No!" for an answer.—EDITOR.]



MORE ABOUT BEE-PARALYSIS.

BY ADRIAN GETAZ.

I must say positively and emphatically that Prof. Cook is mistaken when he says that feeding will cure bee-paralysis. The disease is in all the apiaries of this section of the country, more or less; and has been in mine since I bought my first bees. It has shown itself as well in fed colonies as in others, and often in strong, well-provisioned colonies as much as in weaker ones.

It is early in the spring that the malady is the worst. It is shown by a large number, often the majority of bees, being black, or rather hairless and shiny, as if they had been polished. At the same time they are sluggish, and as if half-paralyzed in their movements. Those in which the disease is less advanced, show it by uneasiness, frequent scratching and twisting of their wings and legs, as if they were itching. As the season advances, the old, shiny bees gradually die out, brood-rearing increases, young bees are born by the thousand, more or less diseased; but in all cases not so much as the old ones, or at least they do not show it so much. Later on the number of young and healthy, or at least comparatively healthy bees increase considerably, and the management of the hive, if I may use that term, falls into their hands. They soon realize that something is wrong with the old bees, and proceed at once to throw them out of the hive. This, in this locality, and with the

average colonies, occurs during May and June. The diseased bees are thrown out gradually, occasionally in large quantities, and the process is kept up as long as other bees show signs of the disease.

During the summer bees wear out too rapidly to have time to show much of the sickness; young bees come in rapidly, and as the season advances less and less diseased bees are seen, until when the winter comes, none but apparently healthy bees are in the apiary.

By that time the inexperienced (?) apiarist thinks that the disease had run out of itself, or if he has applied salt or sulphur, or something else, he imagines that he has found a sure cure, and immediately writes so to some bee-paper. But, alas, for his hopes—the following spring black, shiny bees will be as numerous as the preceding years.

In a recent article in *Gleanings*, Dr. Brown, of Georgia, describes some disease of bees that he thinks caused by poisonous honey from the yellow jasmine. According to his description, his bees must have the bee-paralysis; the fact that the yellow jasmine is in bloom at the time the bee-paralysis is most shown, does not prove that the poisonous (?) honey is the cause of it. We have no yellow jasmine here, and yet our bees show the same symptoms as his do.

Knoxville, Tenn., Aug. 24.

P. S.—In my article on page 240, I said that bee-paralysis has always existed in all the apiaries. I meant to say, all the apiaries of this part of Tennessee.



WINTERING BEES OUT-DOORS.

BY CHAS. DADANT.

A good wintering of bees is the stumbling-block of bee-culture in the northern and central States of America. There are so many cases of failure that the problem of a successful wintering of bees cannot be too thoroughly studied. The main causes of such failures are:

1. A population too weak to maintain a sufficient degree of heat in the hive.
2. A quantity of food inadequate with the needs of the colony during the winter months.
3. Food of so poor a quality that bees living on it cannot remain in good health.
4. A hive which cannot sufficiently protect bees against the cold of winter.
5. A hive so close that the dampness produced by their breathing wets the bees, their comb, and their food.
6. A sequestration of bees, too long protected to allow them to get rid of their feces before they become sick with diarrhea.

To overcome these difficulties bee-keepers have tried several ways of wintering bees:

First. On the summer stands. Second. In rooms above ground. Third. In silos. Fourth. In cellars. We will examine successively all these means.

The first requisite to succeed in wintering bees on the summer stands is a large population; a part of it ought to be young bees. A large population maintains easily the heat inside the hive, and the bees can easily pass from an emptied comb to another containing honey. Besides, as the outside of the hive is kept warm, the bees do not need to eat so much to maintain the indispensable heat, and they can more easily bear a longer seclusion, since their intestines are not so much loaded with feces.

A colony containing a quantity of young bees succeeds better in its wintering

than another with old bees only, because the young bees, which have gone out of their hives but a few times, are more careful, and do not rush out far from the hive, as do the older bees, which, accustomed to go in quest of honey or pollen, go far away, without looking backwards, during a bright winter day, and are often caught and chilled by a change of wind, or by an occasional cloud which darkens the sun.

A sufficient quantity of food. Honey is the only food necessary in winter for bees on the summer stands; but it is to be noticed that the food is used not only to sustain life, but to produce the indispensable warmth, for it has been often ascertained that a large population has consumed less in winter than a smaller one, whose bees were compelled to eat more to keep warm. It is generally admitted that 25 pounds of honey per colony is not too much, to spare the bee-keepers all anxiety about the needs of their bees during the whole winter.



The Home of Mr. W. Z. Hutchinson, at Flint, Mich.

Several means are used to provide bees with a sufficient quantity of food. When but a few colonies of an apiary are short of honey, the most simple means is to take from those which have some to spare what the others need. Such an operation is easy with movable-frame hives. But when no colony has any honey to spare, and this case happens too often to the bee-keepers who use small hives, especially in poor years like this one, the best food to give is sugar syrup, fed to the bees in October. This syrup made with a quart of boiling water and four pounds of granulated sugar, to which one pound of honey or more is added to prevent crystallization, is given at evening, when yet tepid, in old tin cans covered with a piece of cotton-cloth, and inverted on the upper bars of the frames. The bees suck the syrup through the cloth. The Hill bee-feeder, made on the same principle, but entirely of tin, is also used, and saves much labor. A strong colony can put in the comb, in a single night, the contents of three or four of these cans,

But the insufficient quantity of food is not the only want to be supplied. Its bad quality should also be feared, for honey-dew, or dark honey from fall flowers, contains too much indigestible matter. When bees, during winter, can fly out once or twice per month, they have good opportunities to void their feces, and they can remain in good health with food of poor quality; but when the weather remains cold for six or seven consecutive weeks or more, bees fed on poor honey get the diarrhea, soil the inside of their hive, and perish.

To prevent these bad results, it is of good management to extract all the dark honey, especially the honey-dew, and to replace it with sugar syrup. This extracting is especially indispensable when bees have stored fruit-juices. We once bought the combs of some hundred colonies which had been unable to live in winter on these juices, which contains too much water and other matters, and too little sugar.

When the cluster of bees is unable to produce the indispensable warmth during the cold days of winter, they die, sometimes partially, and often wholly. To prevent such accidents, some bee-keepers use chaff hives, or hives with double walls, the interior of which is filled with chaff, or with sawdust.

Some other bee-keepers, for winter, lodge every one of their hives in a large box furnished with a passage for bees. We have tried both systems. Bees, in such hives, do not feel the cold days, but neither do they feel the warm days, and cannot take advantage of the warmth to fly out and get rid of their feces. We prefer to protect our hives during winter only, against the northern winds. Our method is to heap around each hive a pack of dry leaves or straw, which is kept against the hives, on three sides, with rope ladders, each of which is made with about twelve half laths, leaving the front side of the hive free, so as not to prevent the sun from warming the entrance during the few warm days of winter.

By the way, I should warn the young bee-keepers against the idea of transporting their hives to some warmer places just before winter. One of our neighbors has lost nearly all his colonies in consequence of this unadvisable change of place. Most of his colonies perished, and the others were greatly weakened, for the old bees, accustomed to fly from the hives without looking backward, return to the old place where they used to be, and are lost.

I should add that, before winter, we remove the air-tight ceiling which covers the top of the frames of our hives, and replace it with a straw-mat on which we heap up dry leaves. The dampness produced by the bees passes through the mat and condenses in the leaves, which are wet by spring, while the inside of the hive is very dry.

By the means expounded above, bees can sustain a long sequestration without too much loss and suffering.—*Prairie Farmer*.
Hamilton, Ill.



SEVERE DROUTH—BEE-EXPERIENCES, ETC.

BY THEO. F. CRAIG.

We have had some very dry weather for nearly a month, and everything is nearly burned up. Pastures are almost entirely burned. White clover was nearly a failure. Bees are gathering pollen now from pumpkin and cucumber vines and corn-tassels. Most of the catnip is nearly dead. My bees have been working very busily on it for some time.

We have had a very peculiar season. Our bees began carrying in pollen on March 7th. Most of March was very warm and nice. Gooseberries, apple trees, and other fruit trees, were nearly in full bloom when at the last of March we had a cold spell which continued a week, and the mercury was down as low as 18° above

zero, and nearly all fruit was killed. The hives were well filled with brood, which was chilled, and nearly half of the old bees died. When the weather did turn warm, there was not much for them to get until poplar bloomed. Then when poplar was in full bloom, and the third week of May, we had a week of cold, rainy weather.

Bees swarmed but little. One of my neighbors got about 100 pounds of honey from six colonies. Most farmers who have bees are getting discouraged, and are letting their bees die for want of care.

I had a peculiar experience with one colony of my bees this summer. About the last of May my Italian colony (I had just one colony of Italians) swarmed, but lost their queen and returned to the old hive. I had the combs from the old colonies which had died last winter, and took the comb from one old hive, and about half of the bees and a frame of brood from another old hive, and put them in a new hive on the old stand, and moved the old hive away. The old colony had a queen-cell, and soon hatched a queen, which soon went to laying and did well.

I also divided two other colonies of black bees and put them on the old comb with a frame of brood each. They went to work, and soon each had a good laying queen. I looked in the hive of the Italian colony in a week, and they had several queen-cells sealed over. In a week I looked in again, and they had begun to tear down the queen-cells. There were a few that were not torn down. I looked in them two or three times for the next month, but did not see any queen. They had filled the hive nearly full of honey.

In about a month I noticed they had eggs laid in the comb. I had begun to think they had no queen, and intended to give them some more brood to rear a queen, when after two or three weeks I looked over them and found the combs full of drone-brood, and several drones hatched out. I found a black queen, as black as black could be, with her wings entirely eaten off. The drones were very small, and black as could be. Now why the black queen was here is something curious, as I positively know there was no black brood in the hive, as the frame of brood was from as yellow Italian bees as I ever saw.

The only way I can think that it came here, was that the other colonies that I had found had reared two queens, and had driven one out which entered the Italian hive. What do some of the readers of the BEE JOURNAL think?

SWEET CLOVER, ETC.—I wish some of the readers of the BEE JOURNAL would give further-description of sweet clover—when to sow it, what effect cold weather has on it, how much to sow per acre, etc. We need something that will bloom through the very dry weather we have through July and August. Catnip, cucumbers and squashes furnish the only bee-pasture we have now. It is so dry now that buckwheat will not grow.

Otwell, Ind., Aug. 14.



SEASON OF 1894—OUT-DOOR BEE-CELLAR.

BY JOSEPH BEATH.

My bees wintered fairly well last winter, having put 30 colonies in the cellar the last of November, 1893, and took out 28 alive the middle of April, 1894. But several of them were weak, of which I lost 2, leaving me 26. They gathered more honey from apple bloom than I ever knew them to do before. But the freeze the last of May, and the drouth since, ruined our honey crop. I have just examined the bees, and find a very little new honey in the surplus of the strongest colonies. We had a good rain a week ago to-morrow morning—the first real soaking rain this year—in fact about equal to all that we have had before this year. In March, April and May we had only two or three light rains. In June we had three, which made

about two inches of water; then we went from June 29th until July 31st, through all that hot weather without enough to lay the dust. The Government test in Corning reported $2\frac{1}{4}$ inches then, but judging from several pails that were empty the night before, there must have been about five here, six miles north.

There is some buckwheat $\frac{3}{4}$ of a mile south, just coming into blossom; also some heart's-ease, from which my bees are getting their present supply of honey.

HONEY FOR CURING GRAVEL.—In "Our Doctor's Hints" for July 19th, he says that some authorities assert that the daily use of honey is an infallible preventive of gravel or stone in the bladder, but he cannot verify it from personal observation. Now I wish to say that both my father and grandfather died of the gravel, and that I myself had begun to feel its effects some 20 or more years ago. Soon after, I got a colony of bees, and although I did not eat honey regularly, I did eat more or less as I had a chance to, as my bees increased, and the honey likewise, never dreaming, however, that I was using a cure for the gravel, but after a time it disappeared, and I have never had any signs of it since. Now, to test it, how would it be for all apiarists that have friends afflicted in this way, to induce them to try it and report to the bee-papers as the effects develop, for if it is a cure, not many apiarists should be so afflicted? We must bear in mind, however, that there is nothing that will cure all in this world. The only dissolvent that I can think of for calculus there is in honey is the formic acid. If there is any other, will some of our chemists please tell us what it is.

OUT-DOOR CELLAR OR CAVE.—As some of our bee-friends may want to build an out-door cellar or cave, I will give my experience. Eighteen years ago I built one 8 feet wide and 16 feet long, with ridgepole and side logs, 4 posts under the ridgepole, and covered with white pine 2 inch plank up and down. The plank lasted six years, and then was recovered with the same kind of plank, which lasted four years. I then covered it with burr-oak 2-inch plank that had been seasoned under cover for three years, which is still there. But in about the second or third year I had to brace it by putting plank along the middle of them, supported by more posts, which took up too much of the room.

So five years ago this fall I needed more room, and thought there must be a better way to build it. I then dug another of the same size about 8 feet wide, 15 feet long, and $4\frac{1}{4}$ feet deep from the level of the ground, and cut slanting in about 2 inches to the foot (the same as the old one). At about 28 inches from the bottom I left a bench or shelf one foot wide on one side and end, for the purpose of setting canned fruit, skimming milk, or any other use it might be put to. I then cleaned off the top of the ground one foot back from the edge of the hole, and took 2x6 16-foot seasoned oak and laid in cement, leaving 6 inches between the inside edge of the plate and hole on each side. I then took 12 sets of 2x8 pine rafters, 6 feet and 3 inches long, and put on the plates, spiking so the end of the rafter was even with the outer edge of the plate. I then took good inch rough pine boards and covered it, boarded up the ends, put in a ventilator, and covered the whole with cement one inch thick, mixed one of cement to 3 of coarse sand. I used common cement, but would use Portland if to do again. I threw the dirt on as soon as the cement was barely set.

I then took one-half barrel of lime and made a kind of grouting of fine gravel and coarse sand, and spread it $1\frac{1}{2}$ inches thick all over the bottom, so thin that the water stood all over it. I smoothed it off, and let stand until I could walk on it. I then put a strong inch of cement, mixed one of cement and two of sand, and covered the whole sides, benches and everything up to the roof of the same material about

three-eighths of an inch thick ; this makes a cellar as clean as a house, and a floor as solid as a rock.

The whole cost, including labor at the time, was a little over \$30. Pine lumber, \$20 per thousand feet, oak, \$50, and cement \$3 per barrel. I have waited five years to find out what failures there might be in it, if any. Well, two years ago last February the ground was thawed out here, and we had a very heavy rain which turned into a freeze, and it went below zero for several days, which cracked the cement on the roof in a place or two, and the following spring it leaked some, so that there were several moldy spots on the roof. I cleaned them off, and it is as clean to-day as the inside of any building that has been built that long. There is a crack in the cement on the straight side, and one on the rear end, but they do not appear to get any larger, and no signs of the boards rotting so far. My wife has sometimes piled boxes of canned fruit, two or three high, on the benches. The cement was put directly on the dirt (being common prairie soil), but it must be damp for it to stick.

Now, what changes would I make if I were going to build again ? Prof. Budd says that four years ago they built two caves at the Agricultural College—one was covered with two thicknesses of white pine one inch thick, which has rotted down ; the other just the same, only the boards were soaked in a strong solution of salt and lime, which is good yet. So I would treat all soft lumber to a similar solution. I would also use 12-inch plates to put the rafters on, and board and cement solid to and over it. I would also make it one foot wider, as it gives more clear room in the bottom, but the rafters must be made stronger in proportion, as one of mine where there was a knot cracked this spring. I simply spiked another on its side. I have an upright door close to the side at the south end, and two small slanting doors at the top, with 2x6 inch sides for stairs, and loose 2x10 in the steps, so we can take them up to clean them.

Corning, Iowa, Aug. 6.



BEING ANGRY WITH DR. MILLER.

BY REV. W. F. CLARKE.

I did not intend to refer again to my little controversy with Dr. Miller, being quite willing that a man so full of words should have the last word after fully conceding my right to hold my own opinion, which was all I was contending for. But I cannot let the homily read me by John F. Gates, on page 216, go unnoticed. Mr. Gates accuses me of being angry with Dr. Miller ; not only so, but he takes it for granted that I was angry, and exclaims with deep regret and much self-complacency : "What a pity he should get angry so much ?"

I deny the "soft impeachment." I was not angry with Dr. Miller, but I felt hurt at the pertinacity with which he hounded me about the sting-trowel theory, and the apparent vindictiveness and intolerance of spirit he manifested. In his last letter he professes to be greatly relieved that I only held my view of the sting-trowel process as a matter of opinion. That this was a new discovery on his part is quite sufficiently disproved by his own constant references to it as the "sting-trowel theory," and also by my having invariably put it forth as an opinion merely, except in my "Bird's-Eye View of Bee-Keeping," in which I naturally embodied my own opinions, and in regard to which he once himself admitted "license of poetry" as an excuse. But, no ; he put before me no alternative but to prove my theory or own "that there never was any basis except a vivid imagination" for it. I had long before stated the reasons which led me to think the bees used their stings in cell-finishings, so that Dr. Miller's demand was, purely and simply, that I should own

that my theory had no basis except a vivid imagination. This I could not truthfully do, and I resented the demand as a piece of intolerance.

I think Dr. Miller has never accepted Mr. Heddon's pollen theory. At any rate there are many first-class bee-keepers who have not accepted it, but no one of them has ever called on Mr. Heddon either to prove it or own that it never had any basis except a vivid imagination. Why was I singled out as the victim of an intolerant demand? I don't know, and am at a loss to conceive.

I have a high respect and warm love for Dr. Miller, but, like the rest of us, he has faults and failings, of which I have been frank enough to remind him when I thought it necessary. I do not care for a friend who will not tell me of my faults, and I cannot be such a friend to any one. There is an old proverb that he or she is your best friend who tells you of your faults, and the Book of Books declares: "Faithful are the wounds of a friend, but the kisses of an enemy are deceitful."

While on this point I will say that I think Dr. Miller has done me an injustice by not recording his satisfaction among the "Stray Straws" in *Gleanings*. It was a quotation from them in the AMERICAN BEE JOURNAL to which I replied. I did not write to *Gleanings* because the Roots treated me with great injustice on the tobacco question, and also because they rejected the last two articles I sent them. There is a Mutual Admiration Society among bee-keepers; I do not belong to it, and don't want to.

One word more. Mr. Gates assumes that all anger is wicked. I put against that idea two passages of Scripture—Mark 3:3: "And when he (Jesus Christ) had looked round about on them with anger," etc. Eph. 4:26: "Be ye angry and sin not." There is an anger that has no element of sinfulness in it. It is a duty, under certain circumstances, to be angry. When God asked Jonah, "Doest thou well to be angry?" the question implied that if there was just cause for anger, Jonah was not sinning.

Guelph, Ont.

[We think the foregoing discussion has gone far enough, and further "war of words" would be simply a waste of space. But as to there being a "Mutual Admiration Society" existing among bee-keepers, we must confess we hadn't thought of it at all, or heard of it before Mr. Clarke mentioned it. We hope it may turn out to be only one of his many "opinions"—like the "sting-trowel theory," for instance.—EDITOR.]



Los Angeles County Convention.

BY DR. G. A. MILLARD.

The Los Angeles County Bee-Keepers' Association met in the Chamber of Commerce Rooms at Los Angeles, Calif., on Aug. 6, 1894. The meeting was called to order by Dr. G. A. Millard, and Mr. Burgk was elected President *pro tem* in the absence of the President, Prof. Cook.

A NEW BEE-DISEASE.

A communication was received from J. A. Oderlin, of Santa Ana, inquiring as to the cause of his bees dying. According to the description given, his apiary seems to be infected with the new disease, as yet unnamed. Mr. Heart, inspector for this county, reports the disease as resembling foul brood in appearance, but decidedly *not* foul brood; as being prevalent in the northern part of the county, and as being in every apiary in the county so far as he had inspected.

Mr. Jas. Janes stated that a year since he had found the same in his apiary, and treated it by removing old, infected brood, and replacing it with new brood from healthy colonies, and it has not reappeared.

An article was read giving starvation as the cause, but this seems to be a mis-

take, as members present, including Inspector Heart, Mr. Janes, N. Levering, E. E. Shattock, and others have observed it where stores were plentiful. It was also stated that in the central portion of the State, where a fair yield of honey was found this year, this disease was also plentiful.

Mr. Heart's experience is, that as hot weather increases this trouble diminishes.

Mr. Shattock found last year, in his apiary, what on casual observation he pronounced foul brood. He marked the hive, intending, after going through his apiary, to attend to this one, but being very busy he did not get around to it for two weeks, and on opening it for foul brood, he found no trace of it, the bees having cleaned up, and were doing nicely. He was puzzled over the matter, but now concludes it must have been this new disease.

At the afternoon session, a communication by Pres. Cook was read by the Secretary, taken from the *AMERICAN BEE JOURNAL* of Aug. 2, 1894, recommending feeding for bee-paralysis. Mr. Heart does not agree with the idea, as cases coming under his observation, when feeding had been resorted to, resulted with no benefit. Mr. Heart describes the new disease as follows: Brood dies at about eight days, and when first dead looks like foul brood, but lacks the gummy or stringy consistency, and does not have the smell of foul brood.

The writer concludes, from testimony presented, that this is not so new a thing as at first supposed, but has been with us before this season, and as cold weather seems to favor its development, and this season having been unusually cold, it has increased to a remarkable degree, and we hope, with the advent of a more favorable season, the disease will diminish or die out. However, the carrying through winter will be of considerable importance, even with California bee-keepers this year.

THE SUPERS IN WINTER.

"Is it better to remove supers with combs for the winter?" was asked.

Mr. Burgk advised taking off supers so as to leave smaller space for the bees to keep warm during cold weather. Store the supers in a cool place. If the super is not removed, and the colony not strong, place a quilt of waxed cloth over the brood-chamber to retain the heat there. The waxed cloth is made by running muslin through melted wax.

Mr. Shattock suggests muslin oiled with lard as being just as good.

SMOKERS AND FEEDERS.

The bee-smoker suggested and known here as the "Shattock smoker," was recommended. It can be hung on the windward edge of the hive, with the nozzle just above the edge of the brood-chamber, when the wind carries a light smoke across the top of the frames, which is usually sufficient to keep the bees quiet.

Feeding, this season, on account of drouth becomes an interesting question. Mr. Burgk's feeder consists of a frame (such as used in the hives of the apiary) sided up so as to hold syrup. Fill and place a beveled edge float on top of the syrup, from which the bees take it up. When empty, refill.

A feeder suggested by Mr. Janes, is a glass jar inverted in a tin lid, with thin honey for fall. But for hot weather, a common tin fruit-can with top removed, and filled with syrup. Use a float of $\frac{1}{2}$ -inch block with beveled edge, or $\frac{3}{4}$ -inch holes—smaller holes will trap the bees.

To fill the feeder, take a 5-gallon can with a screw top, and attach at the bottom a small faucet connected with a rubber hose. Let your assistant lift the cover of the hive, place the end of the hose in, and fill the feeder, then pass on to the next. Before using the float, soak it over night in water. Floats should be washed occasionally, as they may become coated.

TARE FOR EXTRACTED HONEY.

The weight of cans, in selling honey, was considered. Mr. Levering refused to allow a deduction (tare) for weight of cans, and his honey has been accepted so far this season in that way. It is urged that all bee-keepers stand firm in this matter, and there will be no need of losing as heretofore. When the apiarist buys a can of lard, the weight of the can is never deducted, nor the wrappers around his tea and coffee, but generally he pays well for the fancy wrapper.

Although the attendance at this meeting was light, there was no lack of interest, and all present felt that "it was good to be there." The convention then adjourned until the first Monday in September, 1894.

G. A. MILLARD, Sec.

Los Angeles, Calif.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Year He Ever Saw.

My bees are still booming up. This is the best year for honey that I ever saw in this part of Texas.

I am very much in love with the AMERICAN BEE JOURNAL, and don't want to be without it. I wish it much success in the future.

S. F. OZBURN.

Meridian, Tex., Aug. 29.

Everything Full of Honey.

I have taken 3,136 pounds of honey to date, with enough more ready to take to bring the last extracting up to 1,100 pounds—the same as each of the first and second extractings, if not more. Tired? Oh, I am so tired working with the honey! I got all my vessels full. Notwithstanding the terrible drouth we have had, the bees are still bringing in some honey. We have never had a complete failure here since I have been in the business. Last year was the nearest, and then I got 1,666 pounds, and sold it at 12½ cents per pound.

MRS. S. E. SHERMAN.

Salado, Tex., Aug. 25.

Feeder for Inside the Hive.

On page 182 I notice an article written by Edwin Bevins on how to feed bees inside the hive. I will give my plan for feeding inside. I have tried various ways, but none suits me as well as the following:

I take a brood-frame, make the joints true with a sharp plane, then I nail on each side a board ¼-inch thick. I leave the board rough on the inside so the bees can get a better hold with their feet. I cover about ¾ of the depth of the frame, and that will hold from 3 to 10 pounds of honey, according to the size and length of the frame. That

makes a narrow trough. I then take out one frame of comb near the back of the hive, and hang the feeder in the place of the comb.

I have used this feeder for a number of years, and have fed over 1,200 pounds in the last three years. Put the feeders in with the honey between sundown and dark, and there is no trouble about robbing. I fed 900 pounds one winter in this way, and did not lose a single colony, and there was no trouble with drowning bees.

H. C. WHEELER.

Winchester, Calif., Aug. 27.

About 80 Pounds per Colony.

My crop of honey this year will hurry 80 pounds to the hive. It is not yet all off the hives. The brood-chambers were contracted to ¾ the size of a 10-frame Langstroth. Then I fed extensively before the harvest, and kept prolific queens in all hives.

C. W. DAYTON.

Florence, Calif., Sept. 1.

Sulphur a Cure for Paralysis.

About July 3rd, I discovered that 2 of my 12 colonies of bees had bee-paralysis very bad. Both the colonies were of a very shiny black color, and all the young bees of both colonies were affected the same way, and were also dying very fast. I took one ounce of flour of sulphur for each colony, and put the sulphur in a tin pepper-box, gave the bees a little smoke, then opened the hives and shook the sulphur all over combs, bees, brood, and all over inside of hive, closed it, and in 8 days I found that the bees were all cured of bee-paralysis, and at this writing the two colonies are strong in bees, and are storing honey in the sections.

I send the above information for the benefit of those whose bees are troubled as mine were. The sulphur is a sure cure, if you give them enough. Thanks to the discoverer of the same.

WM. H. DERHAM.

Rockford, Ill., Aug. 27.

Had a Good Honey-Flow, Etc.

Our honey-flow in this part of the country was good—one of my colonies stored about 75 pounds of comb honey, and others did exceedingly well. Swarming! Well, one swarm was all we had. Others had more by letting them swarm for the second and third time.

We found one bee-tree this year so

far, and it was only about 100 yards from the house. We felled the tree, secured about 20 pounds of nice honey, and a very large colony. We saved all the comb and brood, and have a good colony now. I think we can find another tree if we look for it, as we got a good course from the tree we cut.

Mr. Chas. Kirschman also found a bee-tree but he got no honey, neither did he save the bees. He hived them, but they came out and left.

Next year I will try putting hives with old combs in the woods, as others were quite successful in catching swarms that way.

The bees in this part of the country are all blacks and hybrids, except mine. I have some Italians, hybrids and blacks, but the yellow Italians are my choice.

The AMERICAN BEE JOURNAL is indeed a welcome weekly visitor, and from its pages I learn many a lesson. Bee-keepers of Missouri, read the BEE JOURNAL, and send in the reports of your honey crops, and how your bees did this year. Let it be good or bad, it is always worth mentioning, so that we may hear more from our Missouri beekeepers.

F. N. BLANK.

Prairie Home, Mo., Aug. 25.

Rain Needed for Fall Flow.

The spring was wet and cold, and frost killed nearly all the fruit blossoms. I lost quite a number of colonies by spring dwindling. White clover came in good, also basswood, which gave the bees a good start. We had quite a number of showers this season, but it is getting very dry now. If we do not have rain soon, the fall flow will be light.

Gillett, Wis., Aug. 30. R. HOWELL.

"Washington Flax" as a Honey-Plant

I find in this State, growing wild, and generally coming where logging camps have been, or slashing of timber has taken place, a flax called here "Washington flax." The Indians, from this plant, make a good thread, very strong, more durable, and of a superior quality to our domestic article. The plant grows about as high as one's head, and has more the appearance of hemp in its growth than of flax. The flower is a purplish red, and is good for bees, because it continues so long, and at the very times the bees need it. It continues here until late in September, the flower is rather plenty. I mailed you

yesterday a sample of the seed, and I urge bee-men and agriculturists to give it a trial. I know from experience that it is a superior honey-producer, and believe it can be made profitable as a flax.

Who knows but this is the beginning in the introduction to civilization of a plant heretofore untried, which can produce our food and clothing, thereby aiding in settling partially the vexed tariff question? If our own people in this State would raise their own food, produce, make and wear their own cloth, the tariff question would settle itself.

Any of our bee-men sending postage will be mailed some of the seed this season, if application is made before it is gone.

R. H. BALLINGER.

Port Townsend, Wash., Aug. 25.

[The sample was received all right. Thank you. We are always glad to learn of new honey-plants that *are* honey-plants; and of course if they can at the same time be utilized in other ways, so much the better. We trust that so far as possible the new plants may be tried, and reports given thereon. Bee-pasturage must be secured by planting specially, if the natural resources are insufficient.—EDITOR.]

Nucleus Plan of Introducing.

Some one has said that queen-bees are more easily introduced when the colonies to which they are to be introduced are in a prosperous condition. But such has not been my experience. Colonies usually rear drones when prosperous, and I have found it more difficult to introduce a queen to a colony with drone-brood than to one without it. I have always found it less difficult to introduce queens to full colonies early in the spring, before the bees have built up, and late in the fall, after they have ceased brood-rearing, than at other times.

When bees are so prosperous as to think of swarming, which they usually do when they are rearing drones, I refrain from trying to introduce to them a queen under any of the ordinary plans. The nucleus plan will work well at any time, and if I had a valuable queen to introduce at a time when my bees are prospering, I would use the nucleus plan.

H. F. COLEMAN.

Sneedville, Tenn.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Sept. 5.—There is beginning to be more call for honey and receipts are higher as yet. While there is no doubt a moderate crop there is also a lack of money with the consumer to pay high prices, and we don't look for fancy prices. We quote: White comb, 14@15c.; mixed, 12@13c.; dark, 11@12c. Extracted, white, 7@7½c.; mixed, 6½@7½c.; dark, 6c. Beeswax scarce, 28@30c. H. R. W.

BUFFALO, N. Y., Sept. 7.—The demand for honey as yet is moderate, owing to the liberal supply of fruit, etc.; as soon as these early fall fruits are done we anticipate quite an improvement and good demand. Few sales of fancy No. 1 comb are being made at mostly 12c., occasionally 14c. B. & Co.

NEW YORK, N. Y., Aug. 11.—Our market is well stocked with all kinds of extracted honey, and trade is quiet. We quote: White clover and basswood, 6@6½c. a pound; Southern, 50@65c. per gallon, according to quality. A few lots of new comb honey arrived, but the trade on these goods has not opened as yet. In two weeks we will be able to make prices. Beeswax is quiet at 20½@27c. H. B. & S.

CHICAGO, ILL., Aug. 23.—Choice lots of white comb honey are selling at 15c. per pound. The demand is not at all brisk. Extracted brings 5@7c., as quality, flavor and package warrants. As yet little dark comb is offered, and it does not sell at over 10c. Beeswax, 25c. R. A. B. & Co.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Very white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Aug. 23.—We have had a few inquiries for new comb honey; also have had some small shipments of new crop. Demand is as yet limited, but expect a good opening. The weather is too warm yet, and the consumption is hardly begun yet. Prices now ruling would not be a criterion of what the prices will be when the season has fairly opened. We quote: 1-lb. clover—fancy, 14c.; fair, 12@13c.; mixed, 10@11c. Extracted is in better demand for manufacturing purposes. Southern, 50@60c. per gallon; Northern, 5@7c. per pound. Beeswax, 25@28c. C. I. & B.

CINCINNATI, O., Sept. 8.—There is a good demand for comb honey at 14@16c. a pound for choice white, in the jobbing way. Demand has been fair for extracted honey at 4@6c. a pound on arrival. Supply is good. It is unwise counsel to bee-keepers "to hold on" to their honey. Our experience of the past is ample proof that comb honey brings the best prices from September on, while the market is not yet overstocked. The reverse has always been the case about Christmas time, and "holders-on" were disappointed. Our experience of the past will repeat itself this year, as usual.

Beeswax is in good demand at 20@25c. for good to choice yellow. C. F. M. & S.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

UTAH.—The Utah bee-keepers will hold their semi-annual convention on the Oct. 4, 1894, at Salt Lake City, Utah. JNO. C. SWANER, Sec'y.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895. Madison, Wis. J. W. VANCE, Cor. Sec.

MINNESOTA.—The second meeting of the Southern Minnesota Bee-Keepers' Association will be held at Winona, on October 1st, in the Board of Trade rooms, commencing at 10 o'clock a. m. E. C. CORNELL, Sec. Winona, Minn.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p. m. All interested send for program. C. S. Pizer, Sec. Franklin, Pa.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec. Dept. Agriculture, Washington, D. C.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then you will know what a "dandy" thing it is. See page 352 for advertising offer.